### THE EDUCATION OF BOYS

### SUBMISSION TO THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON EDUCATION AND TRAINING



### DEPARTMENT OF EDUCATION, SCIENCE AND TRAINING

Prepared by the Participation and Outcomes Branch, DEST

### **JUNE 2002**

### Contents

EXEC	CUTIVE SUMMARY	3
1.	MAJOR FEATURES AND TRENDS IN THE EDUCATION OF BOYS	
	International Trends	
	National literacy benchmarks results	5
	Influences on literacy outcomes	6
	Vocational Education and Training as a pathway in post-compulsory education	7
	Year 12 Results and Subject Selection	8
3.	CURRENT COMMONWEALTH INITIATIVES TO IMPROVE STUDENT PERFORMANCE AND OUTCOMES	9
	Commonwealth school funding arrangements for literacy and numeracy	
	Department of Education Science and Training Research into Boys Education	10
4.	BIBLIOGRAPHY	12
5.	APPENDIX A	13
	Updated Tables	13
	New Tables	
6.	APPENDIX B	22
	List of Acronyms	,22

This submission updates an earlier submission to the Inquiry on 16 August 2000 by the (then) Department of Education, Training and Youth Affairs (DETYA). Some of the main points of that submission were that boys are performing worse than girls in many areas of education. This problem is not, however, confined to Australia. Overall:

- boys have lower levels of literacy
- boys are less likely to finish school
- boys' average Year 12 scores are lower and appear to be declining
- fewer boys go on to higher education.

This supplementary submission has been prepared to update and complement the earlier submission but not to replace it. The submission contains data which have been released since 16 August 2000, a discussion of emerging trends and the Department's current work in this field.

It is important to note that factors such as socio-economic status, Indigeneity and geographic location also impact on student outcomes for both genders. The combined influences of these factors mean that low SES boys from rural and remote areas, and Indigenous students, are amongst those most at risk of poor educational outcomes.

The earlier submission concluded that the best way to ensure optimum student achievement is through a soundly based education system that is outcome-focused. This should be complemented by the identification and adoption of successful strategies to improve educational outcomes for students, drawing from lessons learnt both in Australia and overseas.

#### International Trends

The DETYA 2000 submission noted that boys' poorer literacy performance is not confined to Australia. This has been confirmed by recent findings from the **Programme for International Student Assessment (PISA 2000),** a major international test of student achievement in the areas of reading, mathematic and scientific literacy<sup>1</sup> conducted by the OECD.

Australia was amongst the highest performers overall when compared with other participating countries. In both reading literacy and mathematical literacy, Australia was significantly outperformed by only one country - Finland in the case of reading, Japan in mathematics. In scientific literacy students from only two countries, Japan and Korea, significantly outperformed our students.

PISA data show that girls performed substantially better than boys in reading literacy in all participating countries, with the gender gap in the mean score being about one-third of a standard deviation. At secondary level, one-third of a standard deviation difference in mean achievement is sometimes said to be roughly equivalent to a full school year level. For all countries, girls' better reading performance was most pronounced in reflecting on and evaluating text (and less so in retrieving information and interpreting text).

When compared to boys in other participating countries, Australian boys still performed well in all three areas of literacy, scoring well above the OECD average. The size of the gender gap in reading literacy for Australia is in the mid range of OECD countries. As for the other participating countries, Australian girls have a higher level of engagement in reading than boys. Boys generally do not read for pleasure as much as girls do. Attitudes toward reading were moderately strongly related to reading achievement for Australian students.

The gender patterns were less clear in mathematics and science literacy. Males performed better than females in mathematics literacy in many of the studied countries, but in the majority of countries the gender gap is not statistically significant. In science literacy there is no consistent pattern of gender difference across the OECD. These results indicate that reading literacy remains the key difference between the performance of girls and boys.

<sup>&</sup>lt;sup>1</sup> Tests for PISA are conducted on 15 year old students in 32 mainly OECD countries. Over 6,000 Australian 15 year old students participated, randomly selected from 231 schools across the country, which were also randomly selected. The assessment is not primarily a test of curriculum content but rather of how well students can apply their knowledge, understanding and skills to meet real situations encountered in adult life.

#### National literacy benchmarks results

The gender gap in reading literacy in PISA data for 15 year old students in Australia can also be seen in early literacy benchmark data. The DETYA 2000 submission to the Inquiry provided the nationally comparable data on Year 3 literacy (reading) benchmarks. Since that time, a new method of calculating the national benchmark figures has been introduced to provide the most accurate picture of student achievement over time.

In 1999, (amended data) 89.7% of Year 3 students achieved the reading benchmark. While the proportion of males achieving the benchmark was 87.9%, for girls the figure was 92.0%. In 2000, 92.5% of Year 3 students achieved the reading benchmark (94.3 for girls, and 90.9% for boys).

For Year 5 students, 85.6% of students achieved the reading benchmark in 1999 (88.4% for girls and 83.4% for boys). In 2000, 87.4% of all students achieved the reading benchmark (89.6% for girls and 85.2% for boys).

A difference between girls and boys in both years 3 and 5 benchmark results was observed in all states and territories. However the published data do not provide any statistical tests of the significance of the differences between boys and girls. The observed difference is consistent with that found in other studies such as the 1997 National School English Literacy Survey for Years 3 and 5 and the PISA 2000 report. Full details of National benchmark data is reported in the annual National Report on Schooling in Australia (<htps://www.curriculum.edu.au/mceetya/index.htm>).

Reading benchmark results by gender and by states/territories are provided in Tables 3 to 6, Appendix A.

There are some differences between the performance of boys across states and territories. In 2000 in Year 3, the proportion of male students who achieved the reading benchmark ranged from 95.2% in Western Australia to 62.2% in the Northern Territory. In Year 5, the proportion of male students who achieved the benchmark ranged from 93.0% in the ACT to 69.3% in the Northern Territory. Interpretation of these differences, however, need to take account of factors such as differences in the characteristics of the student population tested in each jurisdiction (eg the proportion of indigenous students) and in school starting arrangements which result in differences in the time students would have spent in schooling prior to the testing taking place.

There is not a great deal of variation across jurisdictions in the gap between boys and girls in reading. In Year 3 the gap between the proportion of males and females achieving the benchmark ranged from 1.3% in Western Australia to 6.4% in the Northern Territory. In Year 5, the gap varied between 2.5% in Western Australia and 6.6% in Queensland. The only large difference in the overall performance of boys and girls lies between the Northern Territory and other jurisdictions. This is probably a product of the unique demographic make up of the Northern Territory.

Reporting against the Year 3 and Year 5 reading benchmarks for 2001 and against the writing benchmarks for 1999, 2000 and 2001 are likely to be released later in 2002. Year 7 benchmarks for literacy and numeracy were approved in March 2000. It is expected that systems will commence reporting nationally comparable Year 7 data against the literacy and numeracy benchmarks later this year, commencing with 2001 data.

The development of benchmarks for years 9 or 10 is currently under consideration by the Performance Measurement and Reporting Taskforce of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA)

#### Influences on literacy outcomes

The DETYA 2000 submission noted that while overall boys performed worse than girls in reading literacy, there were significant differences in the level of performance between different groups of boys. Socio economic status (SES) is an important background influence for both girls and boys.

This was confirmed by PISA 2000 data where the relationship between socio-economic background and achievement in reading is higher in Australia than in the majority of participating countries. This family background effect compounds the gender effect, so that boys from low SES backgrounds in Australia have a 49% chance of being in the low reading group, while girls from a similar background have a 31% chance. Low SES students are also more likely to have low scores in science and mathematics although the gender differences in these areas are not significant.

The dominance of low SES boys in the bottom group for reading literacy is of concern. The ACER report (2001) on tertiary entrance performance highlighted that educational factors, especially Year 9 achievement in literacy and numeracy have a substantial influence on student's tertiary entrance performance. This suggests that by the time students reach Year 9, the impact of their SES backgrounds has worked through their achievement levels to become a critical factor in determining the students' eventual performance and success in Year 12 and beyond.

The report also found that the gap between boys and girls achievement grows larger between years 9 and 12. And while performance in numeracy has a consistently stronger relationship with tertiary entrance performance than literacy, it is also likely that poor literacy skills is a significant factor towards overall disengagement with learning and failure to complete schooling (Rowe 2000).

#### National numeracy benchmark results

Testing of students' numeracy achievement in years 3 and 5 against the national benchmarks was conducted for the first time in 2000 and the results are reported in the annual National Report on Schooling in Australia (http://www.curriculum.edu.au/mceetya/index.htm).

Across Australia the performance of boys and girls at both Year 3 and Year 5 levels is very similar, with 92.7% of Year 3 boys and 92.8% of Year 3 girls achieving the numeracy benchmark (Table 7 Appendix A). The proportions for Year 5 boys and girls are 89.4% and 89.8% respectively (Table 8 Appendix A). The 2001 numeracy benchmark data is expected to be released later this year.

There is some variability in the proportion of boys achieving the numeracy benchmark across the states and territories. However, the lack of any real difference in the numeracy performance of boys compared with girls applies across the jurisdictions. Caution should be exercised when comparing results across states and territories for the same reasons noted in the section dealing with literacy benchmark results.

#### Vocational Education and Training as a pathway in post-compulsory education

As discussed in the DETYA 2000 submission, when looking at education participation rates for young people it is important to take into account the fact that Vocational Education and Training (VET) has been an important pathway for boys, particularly for early school leavers. While girls are much more likely to stay on to year 12 than boys, the gender difference in the overall participation in education (in school, VET, university or private college) is much smaller.

The table below shows the proportion of 15 to 19 year olds in all types of education. Males aged 16 and 17 are less likely than females to be participating in education whereas total participation rates are similar for males and females at age 15, 18 and 19. Through the ages of 15 to 17 females are more likely to be attending school and between 18 and 19 are more likely to be participating in higher education. After the age of 16 males are considerably more likely than females to be participating in education through part time VET attendance. Males in their twenties are slightly more likely to be participating in both full-time and part-time education.

· · · · · · · · · · · · · · · · · · ·	Sex		Age			
		15	16	17	18	19
Attending Education	Males	96%	89%	77%	65%	52%
Ŭ	Females	97%	93%	86%	64%	54%
At school	Males	95%	85%	62%	25%	1%
	Females	97%	88%	77%	20%	1%
Higher Education- FT	Males	0%	0%	1%	18%	25%
•	Females	0%	0%	4%	25%	35%
Higher Education- PT	Males	0%	0%	0%	0%	1%
-	Females	0%	0%	0%	1%	2%
TAFE- FT	Males	1%	1%	4%	7%	6%
	Females	0%	2%	2%	9%	8%
TAFE-PT	Males	0%	3%	8%	12%	16%
	Females	1%	2%	1%	5%	4%

Table 2.1 Percentage of age group population attending education by gender and age.

Source: Australian Bureau of Statistics: Participation in Education, Sept 1999

The importance of VET for male school leavers is illustrated in the table below which shows that boys make up 55-60% of teenage students studying VET who had left school. There is little gender difference in the proportion of students studying VET who are still in school.

	Still at School (% of total clients in this category)	Left School (% of total clients in this category)
Age 14 or under	51.9	57.0
Age 15	52.3	57.0
Age 16	47.9	59.5
Age 17	49.2	59.6
Age 18	52.9	56.7

Source: NCVER Vocational clients by age group, sex and schooling status for Australia 1997-2000

While the higher proportions of teenage male school leavers undertaking VET do not in themselves indicate that boys leave school early to go to VET (many join the labour market

directly), there is evidence suggesting that some boys substitute study in VET for Year 12 completion. The study, 'Declining rates of achievement and retention: the perceptions of adolescent males', (Trent, 2001) conducted focus groups with 1800 adolescent males in Years 9 to 11, a third of whom were identified as at risk of not completing Year 12. Participating boys were attending public, Catholic and independent schools in both city and rural and regional areas. While some boys preferred the option of vocational education, many of them expressed the view that VET in schools was not offering the same alternative as vocational subjects taught at TAFE because they are alienated from learning in the school setting.

#### Year 12 Results and Subject Selection

The DETYA 2000 submission included a graph on page 17 (Buckingham 2000) that showed the gender gap in average performance in NSW Year 12 had grown from a negligible difference in 1981 to a considerable difference in 1996. More recent DEST research indicates that the pattern of gender performance is fairly similar across the states with boys being over represented in the lower end of Year 12 performance, girls dominating medium to high achievers, and the very top few per cent of students are fairly evenly split between the genders. The research also found that the gender gap appears to have increased between 1994 and 2000, albeit at a slow rate.

Boys' subject selection has been cited as a reason for their lower performance compared to girls in Year 12 results. Commentators such as Teese et al (1997) have expressed the view that boys' narrow choice of subject contributes to their poorer Year 12 performance. More recent internal DEST research indicates that boys are more likely to get higher marks in Year 12 with their current pattern of subject choice.

The subjects in which boys are generally doing best are mathematics, sciences and Information Technology. These subjects have both a large number of boys enrolled in them and a high proportion of boys in the top 20 per cent of students. Subjects in which boys are performing worst are English, History, Geography, Religious Studies and Art. In these subjects boys' share of overall enrolments is low but their representation in the top 20% of performers is even lower. The underperformance of boys in English is particularly significant in affecting their year 12 results because it is a compulsory subject in many states. Boys appear to do best in subjects that have lower literacy requirements in curriculum and assessment.

In the past ten years girls have made considerable gains, in terms of both participation and achievement, in traditionally male dominated maths and science subjects. Physics and Information Technology however, remain largely male dominated subjects. There has been no corresponding improvement in performance for boys in traditionally female dominated subjects such as English or History.

## 2. Current Commonwealth Initiatives to improve student performance and outcomes

The Commonwealth, working in conjunction with States and Territories, has made considerable progress in introducing measures of student outcomes. These measures will provide a basis for measuring the progress in improving outcomes for different groups, including boys.

Under the States Grants (Primary and Secondary Education Assistance) Act 2000, passed by Parliament at the end of 2000, all education authorities are required, as a condition of funding from 2001, to make a commitment to the National Goals for Schooling. One of the National Goals is that student outcomes should be free of any negative effects of discrimination based on sex. Authorities are also called on as a condition of funding to make a commitment to achieve performance measures, including targets, incorporated in the legislation. These commitments form part of the funding agreements between the Commonwealth and each authority.

The performance measures are the percentage of students achieving the Year 3, Year 5 and Year 7 literacy and numeracy benchmarks agreed by all Education Ministers. The national benchmarks have a strong equity dimension that indicates minimum national standards for all students.

The performance targets are that all students will achieve the Year 3 literacy and numeracy benchmark standard from 2001, recognising that a very small percentage of students have severe educational disabilities and may not reach benchmark standard. These targets arise directly from Ministers' commitments at MCEETYA in 1997, that "every child commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years".

#### Commonwealth school funding arrangements for literacy and numeracy

The Commonwealth makes a significant financial contribution to support the work of schools and teachers in improving the literacy and numeracy skills of young Australians, particularly those who are educationally disadvantaged. While the Commonwealth Government's role in education is complementary to State and Territory education provision, and its general recurrent grants are the principal Commonwealth funding source for schools, the Commonwealth also provides additional targeted funding. The targeted funding is provided to government and nongovernment school authorities to be used to achieve outcomes for those students with the greatest need. It is not intended that the Commonwealth funding should meet all the costs for schools to achieve improved outcomes for students who are educationally disadvantaged.

The Strategic Assistance for Improving Student Outcomes (SAISO) Programme is the Commonwealth's major targeted programme. It aims to help government and non-government education authorities and schools improve the learning outcomes of educationally disadvantaged students, particularly in literacy and numeracy, and the educational participation and outcomes of students with disabilities.

The Commonwealth will provide in the order of \$1.4 billion over the four years 2001-04 inclusive, under the SAISO Programme. In 2002, the Commonwealth will provide some \$327 million under the programme. From 1997 to 2000, the Government invested almost \$734 million under the former Literacy and Numeracy Programme, primarily to support implementation of the National Literacy and Numeracy Plan.

In addition to funding provided under the SAISO Programme, the Commonwealth funds a range of strategic national research projects focussed on improving student learning outcomes in

literacy and numeracy. Approximately \$22 million has been allocated for this purpose over the four years 2001-04 under the National Literacy and Numeracy Strategies and Projects programme. The objective of the Programme is to support projects that identify, research and implement strategic national initiatives and developments in literacy and numeracy.

#### Current Department of Education Science and Training Research into Boys' Education

In addition to the significant initiatives and funding provided by the Commonweath to improve educational performance and outcomes for all students including in the area of literacy, the Department also undertakes research on issues specific to the education of boys to inform policy development.

As outlined in the first submission the Department has already conducted a considerable amount of research relating to boys education over the past few years. Examples of this research include the reports Factors Influencing the Educational Performance of Males and Females in School and their Initial Destinations after Leaving School (Collins, Kenway, McLeod 2000); and on Declining Rates of Achievement and Participation, the perceptions of adolescent males (Trent 2001).

There are currently two research projects nearing completion:

- Boys and Literacy: this project is being undertaken by the Curriculum Corporation, James Cook University and Griffith University to identify key issues in terms of boys and their literacy development. The project to date has involved a comprehensive literature review to: (a) establish what we know about literacy development of boys; and (b) identify gaps in the research. The project has also examined and documented strategies which have proven to be effective in improving the literacy outcomes of boys and pilot the strategies in a small number of primary schools. The project aims to produce practical strategies to assist educators to improve boys' literacy outcomes and is focused on primary schools. The project is due for completion by mid-2002.
- Addressing the educational needs of boys strategies for schools and teachers: this project is being undertaken by Murdoch University to investigate the family, social and school factors affecting the educational performance and outcomes of boys and how these factors can be addressed in the school context. The areas examined in the study include the influence of family, school and community environments, peer culture, student-teacher relationships, and teacher classroom practices on student outcomes, educational attitudes, expectations and post-school aspirations. The research aims to analyse the importance of these factors in influencing the educational experiences and achievement of boys and girls from different backgrounds and to identify the school and classroom strategies which can deliver improved academic and social outcomes for all students. The project is due to be completed later this year.

The Department is also currently conducting a number of projects that, while not directly targeting the education of boys, address issues that are frequently raised in connection with boys, for example:

Middle Years of Schooling: The Department has contracted the University of Queensland to undertake a project that will focus on students in the middle years who are educationally disadvantaged in terms of their literacy and numeracy outcomes, including those who have learning difficulties and problems in the transition from primary to secondary school. While this project is not specifically targeted at boys' education, it would appear that boys are overrepresented in the groups of students targeted by the project. The project aims to provide

information on current, effective strategies and reforms across Australia in improving literacy and numeracy outcomes which can be implemented at a whole school or system level. This project forms the first stage of a \$5 million Commonwealth initiative over 2002-2003 to improve literacy and numeracy at this critical stage of schooling. The project is due for completion by mid-2002. Australian Bureau of Statistics, Schools Australia, Cat No 4221.0, various years.

- Collins C, Kenway J, McLeod J (2000) Factors Influencing the Educational Performance of Males and Females in School and their Initial Destinations after Leaving School, J.S. McMillan
- Department of Employment, Education, Training and Youth Affairs (1998) Literacy for All: The Challenge for Australian Schools, Canberra: AGPS.
- Department of Employment, Education and Training (1991) Retention and Participation in Australian Schools, 1967 to 1990, AGPS, Canberra.
- Lamb (1997) School Achievement and Initial Education and Labour Market Outcomes, LSAY Report No. 4, Melbourne: ACER.
- Lamb, S. and McKenzie, P. (forthcoming) Patterns of Success and Failure in the Transition from School to Work in Australia, LSAY Report, Melbourne: ACER.
- Lamb, S. and Rumberger, R. (1999) The Initial Work and Education Experiences of Early School Leavers, A Comparative Study of Australia and the United States, LSAY Report No. 14, Melbourne: ACER.
- MacCann, R. (1995) A Longitudinal Study of Sex Differences at the Higher School Certificate and School Certificate: Trends over the Last Decade, Sydney: NSW Board of Studies.
- Gary Marks, Julie McMillan and Kylie Jillman (2001) LSAY Research Report No 22: Tertiary Entrance Performance: The Role of Student Background and School Factors. Melbourne: ACER Press, November 2001
- OECD (2001) Knowledge and Skills for Life, Paris: OECD.
- Rowe, K and K (2001) Submission to the House of Representatives Standing Committee on Employment, Education and Workplace Relations.
- Trent, F. (2001) Declining Rates of Achievement and Participation, the perceptions of adolescents males, DEST (formerly known as DETYA).

#### **Updated Tables**

Updated Table 3:	Percentage of Year 3 students achieving the reading benchmark, by State and Territory, 1999
Updated Table 7:	Time series of apparent retention rates to Year 12 by gender, Australia, 1967-2001
Updated Table 14:	VET Number of students
Updated Table 15:	VET Enrolments, percentage of each gender
Updated Table 17: Updated Table 18:	Number of students in Higher Education Commencements in Higher Education

#### **New Tables**

New Table 1:	Percentage of Year 5 students achieving the reading benchmark, by State and
	Territory, 1999
	Percentage of Year 3 students achieving the reading benchmark, by State and Territory, 2000
New Table 3:	Percentage of Year 5 students achieving the reading benchmark, by State and Territory, 2000
New Table 4:	Percentage of Year 3 students achieving the numeracy benchmark, by State and Territory, 2000
New Table 5:	Percentage of Year 5 students achieving the numeracy benchmark, by State and Territory, 2000
New Table 6:	Numbers of Students Participating in VET by gender, age and school completion status

### Updated Table 3: Percentage of Year 3 students achieving the reading benchmark, by State and Territory, 1999 (revised)

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales			
1 8yrs, 9mths	92.6	94.8	2.2
2. 3yrs, 7mths	± 2.1	± 1.5	
Victoria			5.0
1 8yrs, 11mths	86.2	92.0	5.8
2. 3yrs, 7mths	± 2.9	± 2.0	
Queensland (c) (d)			5.6
1. 8yrs 3mths	83.9	89.4	
2. 2yrs, 8mths	± 4.9	± 3.5	
South Australia			2.3
1. 8yrs, 6mths	85.5	87.8	
2. 3yrs, 3mths	±3.2	± 2.4	
Western Australia			
1. 8yrs, 2mths	86.8	90.8	4.0
2. 2yrs, 7mths	± 2.5	± 1.8	
Tasmania			5.9
1. 9yrs, Omths	86.0	91.9	
2. 3yrs, 7mths	±3.1	±2.2	
Northern Territory			3.8
1. 8yrs, 8mths	75.9	79.7	
2. 3yrs, 3mths	± 3.1	± 2.7	
Australian Capital			
Territory			2.1
1 8yrs, 9mths	94.2	96.3	
2. 3yrs, 6mths	± 1.5	± 1.3	
Australia(e)	87.9	92.0	4.1
	+ 3.0	+2.2	

Note: The achievement percentages reported in this table include 95% confidence intervals, for example,  $80\% \pm 2.7\%$ .

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) Data from Queensland are based on a sample of approximately 10% of Year 3 students from government and non- government schools.

(d) Data from Queensland for the percentage of male and female students does not include students who were formally exempted from the testing.

(e) Student sub-group data for Australia do not include Queensland students who were formally exempted from the testing.

•

New Table 1: Percentage of Year 5 students achieving the reading benchmark, by State and Territory, 1999

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales	88.6	92.0	3.4
1 10yrs, 9mths	±1.6	±1.3	
2. 5yrs, 7mths			
Victoria	85.6	90.5	4.9
1 10yrs, 11mths 2. 5yrs, 7mths	±2.1	±1.7	
Queensland (c)	78.2	84.3	6.1
1. 10yrs 4mths 2. 4yrs, 8mths	±3.5	±2.6	
South Australia	80.2	85.8	5.6
1. 10yrs, 6mths 2. 5yrs, 3mths	±1.8	±1.4	
Western Australia	75.5	83.6	8.1
1. 10yrs, 2mths 2. 4yrs, 7mths	±3.1	±2.3	
Tasmania	76.2	81.3	5.1
1. 11yrs, 0mths 2. 5yrs, 8mths	±2.2	±1.9	
Northern Territory	77.3	80.0	2.7
1. 10yrs, 8mths 2. 5yrs, 3mths	±2.0	±1.5	
Australian Capital	88.6	92.1	3.5
Territory 1 10yrs, 8mths	±2.2	±1.9	
2. 5yrs, 6mths			
Australia	83.4	88.4	5.0

Note: The achievement percentages reported in this table include 95% confidence intervals, for example,  $80\% \pm 2.7\%$ .

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) Data from Queensland for the percentage of male and female students does not include students who were formally exempted from the testing.

## New Table 2: Percentage of Year 3 students achieving the reading benchmark, by State and Territory, 2000

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales			
1 8yrs, 9mths	91.5	94.8	3.3
2. 3yrs, 7mths	± 2.3	± 1.5	
Victoria			4.0
1 8yrs, 11mths	91,1	95.1	4.0
2. 3yrs, 7mths	± 2.3	± 1.5	
Queensland (c)			
1. 8yrs 4mths	90.8	94.4	3.6
2. 2yrs, 8mths	± 4,4	± 3.2	
South Australia 1. 8yrs, 6mths 2. 3yrs, 3mths	84.4 ± 3.0	89.3 ± 1.7	4.9
Western Australia			
1. 8yrs, 2mths	95.2	96.5	1.3
2. 2yrs, 7mths	± 1.3	± 0.9	
Tasmania 1. 9yrs, 1mths 2. 3yrs, 8mths	88.7	93.6	4.9
•	±2.9	±2.0	
Northern Territory 1. 8yrs, 8mths 2. 3yrs, 3mths	62.2 ± 3.8	68.6 ± 3.7	6.4
Australian Capital			
Territory			2.2
1 8yrs, 8mths	94.0	96.2	
2. 3yrs, 6mths	± 2.0	± 1.5	
Australia	90.9	94.3	3.4
	+2.7	+1.8	

Note: The achievement percentages reported in this table include 95% confidence intervals, for example,  $80\% \pm 2.7\%$ .

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) Data from Queensland are based on a representative sample of approximately 10% of students from government and non-government schools.

## New Table 3: Percentage of Year 5 students achieving the reading benchmark, by State and Territory, 2000

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales			
1 10yrs, 9mths	87.1	91.2	4.1
2. 5yrs, 7mths	<u>± 1.9</u>	± 1.5	
Victoria			3.1
1 10yrs, 11mths	90.6	93.7	0.1
2. 5yrs, 7mths	± 2.2	± 1.7	
Queensland 1. 10yrs 4mths 2. 4yrs, 8mths	75.1 ± 3.9	81.7 ± 3.5	6.6
South Australia 1. 10yrs, 6mths 2. 5yrs, 3mths	82.2 ± 1.5	86.7 ± 1.4	4.5
Western Australia 1. 10yrs, 2mths 2. 4yrs, 7mths	92.4 ± 1.2	94.9 ± 0.8	2.5
Tasmania 1. 11yrs, 0mths 2. 5yrs, 8mths	78.7 ±3.3	84.3 ±2.8	5.6
Northern Territory 1. 10yrs, 8mths 2. 5yrs, 3mths	69.3 ± 3.4	73.1 ± 3.3	3.8
Australian Capital Territory			5.7
1 10yrs, 8mths 2. 5yrs, 6mths	93.0 ± 2.3	98.7 ± 2.5	
Australia	85.2 +2.3	89.6 +1.9	4.4

**Note:** The achievement percentages reported in this table include 95% confidence intervals, for example, 80% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

### New Table 4: Percentage of Year 3 students achieving the numeracy benchmark, by State and Territory, 2000

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales			
1 8yrs, 9mths	93.1	93.3	0.2
2. 3yrs, 7mths	± 1.7	± 1.7	· · · · · · · · · · · · · · · · · · ·
Victoria			0.6
1 8yrs, 11mths	96.7	96.1	0.6
2. 3yrs, 7mths	± 1.3	± 1.5	
Queensland (c)			
1. 8yrs 4mths	91.5	91.8	0.3
2. 2yrs, 8mths	± 3.6	± 3.4	
South Australia			0.9
1. 8yrs, 6mths	84.9	85.8	
2. 3yrs, 3mths	± 2,3	± 2.4	· · · · · · · · · · · · · · · · · · ·
Western Australia			0.6
1. 8yrs, 2mths	90.2	90.8	
2. 2yrs, 7mths	<u>± 2.2</u>	± 2.3	
Tasmania			
1. 9yrs, 1mths 2. 3yrs, 8mths	92.3	93.2	0.9
	±2.0	±1.9	
Northern Territory			
1. 8yrs, 8mths 2. 3yrs, 3mths	80.6	82.4	1.8
•	± 2.5	± 2.6	
Australian Capital Territory			
1 8yrs, 8mths	95.2	96.3	1.1
2. 3yrs, 6mths	± 2.1	± 2.3	••••
Australia	92.7	92.8	0.1
	+2.1	+2.1	

Note: The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) Data from Queensland are based on a representative sample of approximately 10%students from government and non-government schools.

# New Table 5: Percentage of Year 5 students achieving the numeracy benchmark, by State and Territory, 2000

State/Territory 1 Average Age (a) 2 Years of Schooling (b)	Percentage of male students achieving the bench mark	Percentage of female students achieving the bench mark	Difference between percentage of male and female students achieving the bench mark
New South Wales			
1 10yrs, 9mths	90.8	91.5	0.7
2. 5yrs, 7mths	± 1.4	± 1.4	
Victoria			0.0
1 10yrs, 11mths	94.1	94.4	0.3
2. 5yrs, 7mths	± 1.4	± 1.4	
Queensland 1. 10yrs 4mths 2. 4yrs, 8mths	86.0 ± 2.4	87.0 ± 2.4	1.0
South Australia 1. 10yrs, 6mths 2. 5yrs, 3mths	83.1 ± 2.2	82.7 ± 2.6	0.4
Western Australia 1. 10yrs, 2mths 2. 4yrs, 7mths	87.5 ± 1.1	87.5 ± 2.2	0
Tasmania 1. 11yrs, 0mths 2. 5yrs, 8mths	87.9 ±2.1	87.2 ±2.1	0.7
Northern Territory 1. 10yrs, 8mths 2. 5yrs, 3mths	74.5 ± 3.0	73.7 ± 3.4	1.2
Australian Capital Territory			
1 10yrs, 8mths 2. 5yrs, 6mths	91.0 ± 2.5	91.6 ± 2.5	0.5
Australia	89.4 +1.7	89.8 +1.8	0.4

Note: The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent.

(a)

The typical average age of students at the time of testing, expressed in years and months. The typical average time students had spent in schooling at the time of testing, expressed in (b) years and months.

Year	Males	Females	Persons	Year	Males	Females	Persons
1967	26.5	18.7	22.7	1985	43.5	49.5	46.4
1970	33.0	25.5	29.3	1986	45.6	52.1	48.7
1971	34.1	26.9	30.6	1987	49.4	57.0	53.1
1972	35.7	28.9	34.2	1988	53.4	61.8	57.6
1973	35.2	30.8	33.1	1989	55.5	65.2	60.3
1974	34.1	31.6	32.9	1990	58.3	69.9	64.0
1975	34.6	33.6	34.1	1991	66.1	76.7	71.3
1976	34.6	35.3	34.9	1992	72.5	82.0	77.1
1977	34	36.6	35.3	1993	71.9	81.4	76.6
1978	33.1	37.3	35.1	1994	69.6	79.9	74.6
1979	32.4	37.2	34.7	1995	66.7	77.9	72.2
1980	31.9	37.3	34.5	1996	65.9	77.0	71.3
1981	32.0	37.8	34.8	1997	66.2	77.8	71.8
1982	32.9	39.9	36.3	1998	65.9	77.7	71.6
1983	37.5	43.9	40.6	1999	66.4	78.5	72.3
1984	42.1	48	45	2000	66.1	78.7	72.3
				2001	68.1	79.1	73.4

Updated Table 7: Time series of apparent retention rates to Year 12 by gender, Australia, 1967-2001

Sources: Australian Bureau of Statistics: Schools Australia Australian Department of Education

#### Updated Table 14: Number of VET students

	1989	1991	1993	1995	1998	1 <del>9</del> 99	2000
Females	439600	444800	514500	600500	744500	803,100	857,900
Males	492700	541100	606900	672200	790700	835,100	884,900

Source: NCVER Statistics 2000

#### Updated Table 15: VET Enrolments, percentage of each gender

	1989	1991	1993	1995	1998	1999	2000
Female share %	47.1	45.1	45.9	47.2	48.4	49	49.2
Male share %	52.9	54.9	54.1	52.8	<u>51.6</u>	51	50.8

Source: NCVER Statistics 2000

#### Updated Table 17: Number of students in Higher Education Non-overseas students by gender, 1989-2001

	1989	1992	1995	1997	1999	2000	2001
Females	221,812	284,302	304,711	328,907	336,947	337,981	346,148
Males	198,150	241,003	253,278	266,946	266,209	261,896	267,928

Source: Students 2001: Selected Higher Education Statistics

#### Updated Table 18 Commencements in Higher Education

Non-overseas commencing students by gender, 1989-2001

<b>[</b>	1989	1992	1995	1997	1999	2000	2001
Females	54.8%	55.2%	56.2%	56.5%	56.9%	57.3%	57.3%
Males	45.2%	44.8%	43.8%	43.5%	43.1%	42.7%	42.7%

Source: Students 2001: Selected Higher Education Statistics

## New Table 6. Numbers of Students Participating in VET by gender, age and school completion status

		MALE CLIENTS		
	Still at School	Left School	Unknown	Total
Age 14 or under	2,556	528	1,128	4,212
Age 15	7,186	4,886	3,002	15,074
Age 16	16,884	15,725	5,209	37,818
Age 17	15,987	26,125	5,941	48,053
Age 18	3,809	43,058	8,491	55,358

		FEMALE CLIENTS		
	Still at School	Left School	Unknown	Total
Age 14 or under	2,360	389	1,108	3,857
Age 15	6,540	3,517	2,382	12,439
Age 16	18,284	10,627	4,471	33,382
Age 17	16,436	17,629	4,772	38,837
Age 18	3,387	32,683	6,970	43,040

#### ALL CLIENTS IN THESE AGE RANGES

	Still at School	Left School	Unknown	Total
Age 14 or under	4,921	918	2,242	8,081
Age 15	13,728	8,525	5,395	27,648
Age 16	35,175	26,423	9,753	71,351
Age 17	32,439	43,779	10,762	86,980
Age 18	7,198	75,825	15,540	98,563

Source: NCVER, Vocational clients by age group, sex and schooling status for Australia 1997-2000.

#### List of Acronyms

ACER	Australian Council of Educational Research
ADHD	Attention Deficit Hyperactive Disorder
ANR	Australian National Report on Schooling
CDEP	Community Development Employment Projects
CESCEO	Commonwealth Education Systems Chief Executive Officers
DEETYA	Department of Employment, Education, Training and Youth Affairs
DETYA	Department of Education, Training and Youth Affairs
ERO	Education Review Office (New Zealand)
FSS	Full Service Schools
HSC	Higher School Certificate
IEDA	Indigenous Education Direct Assistance
JET	Jobs Education and Training
JPET	Job Placement, Employment and Training Programme
JPP	Jobs Pathways Programme
LEA	Local Educational Authorities (United Kingdom)
LSAY	Longitudinal Surveys of Australian Youth
MCEETYA	Ministerial Council on Employment, Education, Training and Youth Affairs
NFER	National Foundation for Educational Research (United Kingdom)
NIELNS	National Indigenous English Literacy and Numeracy Strategy
NLLIA	National Language and Literacy Institute of Australia
OECD	Organisation for Economic Co-operation and Development
SAISO	Strategic Assistance for Improving Student Outcomes
SES	Socioeconomic status
SRP	Strategic Results Projects
TAFE	Technical and Further Education

TER	Tertiary Entrance Rank
TES	Tertiary Entrance Score
TIMSS	Third International Mathematics and Science Study
VET	Vocational Education and Training